

200400158

THE UNITED STAYLES OF AMIERICAL

TO ALL TO WHOM THESE PRESENTS SHALL COME:

California Planting Cotton Seed Distributors

ILCCOS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN APUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR PORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE DUE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE OSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT FED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321

COTTON

'Del Mar'

In Testimonn Therest, I have hereunto set my hand and caused the seal of the Hunt Unitedy Trotection Office to be affixed at the City of Washington, D.C. this first day of Wharch, in the year two thousand and five.

Alfohan

Secretary of Agriculture

Form Approved - OMB No. 0581-0055 REPRODUCE LOCALLY. Include form number and date on all reproductions The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552e) and the Paperwork Reduction Act (PRA) of 1995. U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426). APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse) 1, NAME OF OWNER 2. TEMPORARY DESIGNATION OR 3. VARIETY NAME EXPERIMENTAL NAME 5/28/04 EL MAR' California Planting Cotton Seed Distributors M658 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 5. TELEPHONE (include area code) FOR OFFICIAL USE ONLY PVPO NUMBER PO Box 80357 (661) 399-1400 Bakersfield, CA 93380.0357 6. FAX (include area code) (661) 399-3169 IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) IF INCORPORATED, GIVE STATE OF INCORPORATION 9. DATE OF INCORPORATION Corporation California May 13, 1936 10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Stephen R. Oakley 30597 Jack Avenue Shafter, CA 93263 11. TELEPHONE (Include area code) 12. FAX (Include area code) 13. E-MAIL 14. CROP KIND (Common Name) (661) 746-6905 (661) 746-3366 sroakley@cpcsd.com cotton 15. GENUS AND SPECIES NAME OF CROP 16. FAMILY NAME (Botanical) 17. IS THE VARIETY A FIRST GENERATION HYBRID? Gossypium hirsutum L. Malvaceae ☐ YES 18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(e) of the Plant Variety Protection Act) Exhibit A. Origin and Breeding History of the Variety □ NO (If "no", go to item 22) YES (If "yes", answer items 20 and 21 below) Exhibit B. Statement of Distinctness 20. DOES THE OWNER SPECIFY THAT SEED OF THIS ☐ YES **₩** NO VARIETY BE LIMITED AS TO NUMBER OF CLASSES? Exhibit C. Objective Description of Variety Exhibit D. Additional Description of the Variety (Optional) IF YES, WHICH CLASSES? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED Exhibit E. Statement of the Basis of the Owner's Ownership 21. DOES THE OWNER SPECIFY THAT SEED OF THIS NO VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public IF YES, SPECIFY THE NUMBER 1.2.3, etc., FOR EACH CLASS, repository) ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED Tiling and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office) (If additional explanation is necessary, please use the space indicated on the reverse.) 22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. 23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? OR OTHER COUNTRIES? X ·NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.) IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.) The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed Talse representation herein can jeopardize protection and result in penalties. SIGNATURE OF OWN SIGNATURE OF OWNER NAME (Please print or type NAME (Please print or type)

CAPACITY OR TITLE

ST-470 (02-10-2003) designed by the Plant Variety Protection Office using Word 2000. Replaces former versions of ST-470, which are obsolete

Feb 29, 2004

Stephen R. Oakley

Vice President, Director of R&D

CAPACITY OR TITLE

(See reverse for instructions and information collection burden statement,

DATE

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

> **Plant Variety Protection Office** Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

ITEM

18a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 19. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)
- 23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center--East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed.htm

According to the Paperwork Reduction Act of 1995, an egency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 3.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice end TDD). USDA is an equal opportunity provider and employer. ST-470 (02-10-2003) designed by the Plant Variety Protection Office with

200400158 REPLACEMENT 5/6/04 WALL

Exhibit A. - Origin and Breeding History - M658 'DEL MAR' LALL 5128/04

M658 is a variety of cotton developed from the cross SI297 x SI293 made in 1992 at the CPCSD Cotton Research and Development Station, Shafter, California. The parents SI297 and SI293 are selections made for fiber quality and Verticillium-wilt tolerance in the SJV from the commercials varieties DP 5816 and DP 5415, respectively, developed and released by the Delta and Pine Land Company, Scott, Mississippi. The variety DP 5816 was developed from the cross DP Acala 90 x DP 69, while DP 5415 was developed from DP 50 x DP Acala 90. DP Acala 90 came from the cross DP 6516 x DP 6583, while DP 69 is believed to be a selection from DP 61. The background of all these lines are detailed by Calhoun, et al. (Calhoun, D.S., D.T. Bowman, and O.L. May, 1994, Pedigree of Upland and Pima Cotton Cultivars Released Between 1970 and 1990, MAFES Bulletin 1017, Mississippi State University, MS 39762).

Details of Selection

Seed from the cross SI297 x SI293 were planted in the 1992-93 Tecoman winter nurseries as an F_1 population and subsequently planted in 1993 as an F_2 row at a CPCSD Upland breeding nursery in Mexicali, Mexico, which was bulk harvested. The F_3 and F_4 seed were bulk harvested and these populations were selected on the basis of heat tolerance, fiber quality and yield potential. A pedigree selection procedure followed in the F_5 and F_6 (plant to row basis) as individual plants were each selected on the basis of agronomic characteristics, yield potential, and fiber properties. In 1998 F_8 seed from the F_7 row M658 was bulk harvested and entered into the 1999 CPCSD Upland Lines Test. This line designated M658 continued testing in the 2000 to 2002 CPCSD testing programs.

Variants and Stability

CPCSD M658 is now entering its sixth season of evaluation and large scale testing and no variants have been observed. M658 has been uniform and stable.

Population Size for Selection	
Population	Approximate Number of Individuals
F ₁	180
F ₂ - F ₄	2000
F ₅ - F ₆	60

<u>Year</u>	<u>Event</u>	Generation
1992	Cross: SI297 x SI293 DP Acala 90 x DP 69 = DP 5816 selection = SI297 DP 50 x DP 69 = DP 5415 selection = SI293	7
1992-93	Increased in Tecoman Winter Nursery as F1-106	F ₁
1993	F1-106 planted as row M239	F ₂
1994	Row M239 planted as row A6121	F ₃
1995	Row A6121 planted as row M398	F ₄
1996	Row M398 planted as row M458	F ₅
1997	Plant selection M458-2 planted as row M559	F ₆
1998	Plant selection M559-3 planted as row M658, and row M658 was harvested as a progeny row	F ₇
1999-2003	M658 tested in CPCSD Upland testing program	

Exhibit B. - Statement of Distinctness - M658

The San Joaquin Valley of California Cotton Standard, Acala Maxxa, was included in Exhibit C. M658 was compared to cotton varieties SureGrow 747 and

IDEL MAR. REPLACEMENT

Stoneville 474 in fifteen test locations over three years. M658 was most similar to 5 /6/04 LAW Suregrow 747.

The yield and quality summary for the 2001 CPCSD California Upland Advanced Strain Tests (CA locations) are presented in Exhibit B Table 1. M658 is a novel cotton variety compared with SureGrow 747 due to its longer fiber, higher fiber strength and lower fiber elongation.

Exhibit B Table 1. 2001 CPCSD Upland AST - Summary of California Locations

•	2.5% span		
Variety	length	T1	E1
	(in)	(g/tex)	
SureGrow 747	1.107	18.2	9.3
M658	1.158	21.2	7.7
LSD.05	0.021	1.3	0.6
CV	1.4	4.5	6.0

200400158 REPLACEMENT 5/6/04 LALL

2001 CPCSD UPL Locations - Fiber Quality

Location: Shafter

	2.5%		
	span		
Variety	length	T1	E1
	(in)	(g/tex)	
STV 474	1.143	19.3	8.6
SG 747	1.145	17.9	10.6
M658'DEL MAR	` 1.18	21.4	8.0
CV LAN /28/04		3.4	5.9
LSD SIZERON	0.032	1.2	0.8

Location: Strathmore

	2.3%		
	span		
Variety	length	T1	E1
	(in)	(g/tex)	
STV 474	1.110	19.2	8.7
SG 747	1.130	19.3	8.9
M658	1.16	19.5	9.6
CV	1.180	5.3	6.5
LSD	0.024	1.9	1.0

Location: Riverdale

•	2.5%			
	span			
Variety	length	T1	E1	
	(in)	(g/tex)		_
STV 474	1.070	18.6	6.5	
SG 747	1.045	17.5	8.4	
M658	1.14	22.7	6.7	
CV	1.379	4.9	4.9	_
LSD	0.028	1.8	0.6	

Across California locations 2001

	2.5%		
	span		
Variety	length	T1	E1
	(in)	(g/tex)	
STV 474	1.108	19.0	7.9
SG 747	1.107	18.2	9.3
M658	1.16	21.2	7.7
CV	1.372	4.5	6.0
LSD	0.021	1.3	0.6

U.S. DEPARTMENT OF AGRICULTURE PLANT VARIETY PROTECTION OFFICE, AMS, USDA NATIONAL AGRICULTURAL LIBRARY Bldg., Rm. 400 10301 BALTIMAORE Blvd. BELTSVILLE, MD 20705

OBJECTIVE DESCRIPTION OF VARIETY COTTON (Gossypium spp.)

NAME OF APPLICANT(S)		TEMPORARY DE	ESIGNATION	VARIETY NA	AME
California Planting Co		M658		'DEL	MAR' stestou
ADDRESS (Street and No., or I	C.F.D. No., City, State, and ZIP Code			OR OFFICIAL USI	ONLY
DO D 00255				VPO NUMBER	
PO Box 80357 Bakersfield, CA 9338	0_03 <i>57</i>			6) A & .	
Dakersheid, CA 7550	0-0337			2004	00158
Place the appropriate data that d	escribes the varietal characteristic of	this variety in the spa	ce provided. Cha		
	l represent those that are typical for the		-		-
	Characters marked with an asterisk *				-
CDECIEIC VADIETIES LIGHT	FOD COMPANISON AS OTTOWN	A DECEMBER DI CONTRO	1777 70 177031		
	FOR COMPARISON AS CHECK V			Use standard regi	onal check varieties which are
adapted to your area. One of the	comparison varieties must be the me	ost similar variety use	a in Exhibit B.		
Variety 1. SUREGROW 74	7 Variety 2	ACALA MAXXA		Variety 3	
*1. SPECIES:			7*************************************		
	_ G. hirsutum L.		barbadense L.		
*2. AREA(S) OF ADAPTATIO	N: (A=Adapted, NA= Not Adapted,	NT= Not Tested)			
Eastern	Delta		Central	Blac	klands
Plains	Weste		Arizona		Joaquin
Other (Specify);					
3. GENERAL: Characteristics w	hich are known to be variable but are	e still useful for a me	aninful description	n of the variety.	
	M658			Iaxxa	
-		SG747		n Variety 2	Comparison Variety 3
	,,		Oliparis		Companion (and)
Plant Habit: Spreading, Intermediate, Compact	Ţ	ī		I	
Esta			<u></u>		
Foliage: Sparse, Intermediate, Dense	I	Ι .		I	
-			<u> </u>	· · · · · ·	
Stem Lodging: Lodging, Intermediate, Erect	I	I		I	
Fruiting Branch: Clustered, Short, Normal					
Clustered, Short, Normal	<u>N</u>	N		N	
Growth:					
Determinate, Intermediate,	Intermed	Intermed	Inte	ermed	
Indeterminate	momo	memen	11100	AIIICU	
Leaf Color Greenish yellow, Light green,					
Medium green, Dark green	MG	LG]	DG	

3. GENERAL:

200202350

3. GENERAL:	M658 (1) 51	25/04 SG747	20040a8xa158	····
Boll Shape: Length LESS than	<i>.</i>	•		
width, Length EQUAL to width,				
Length MORE than width	More	More	More	
Boll Breadth: Broadest at base,		*****		
Broadest at middle	Middle	Middle	Middle	
*4. MATURITY: (Days for 50% Op	en bolls from sequential h	arvest dates.)		
Days for 50% Open Bolls	148	140	146	
5. PLANT:				
Cm to 1st Fruiting Branch:				
(from cotyledonary node)	27.3	25.5	25.8	
No. of Nodes to 1st Fruiting				
Branch:				
(excluding cotyledonary node)	5.10	4.30	4.10	
Mature Plant Height cm:				
(from cotyledonary node to terminal)	109.3	112.8	110.8	
*6. LEAF Type: Normal Sub Okra, Okra,				
Super Okra	N	N	N	
Pubescence: Absent, Sparse, Medium,	, v-114.			
Dense OR Trichomes/cm2 (Bottom				
surface excluding veins)	M	M	M	
Nectaries: Present or Absent	P	P	P	
*7. STEM PUBESCENCE: Glabrous, Intermediate, Hairy	T	ī	T	
10.07.13770.70	I	I	I	
*8. GLANDS: (Gossypol) Absent, S	Sparse, Normal, More Than N		NI	
Leaf:	N	N	N	
Stem:		N	N	
Caly% Lobe: (normal is absent)	A	A	A	
*9. FLOWER				
Petals: Cream, Yellow	С	C	C	
Pollen: Cream, Yellow	C	C	C	
Petal Spot: Present, Absent	Α	A	A	
*10. SEED				
Seed Index:				
(g/100 seed, fuzzy basis)	9.9	9.9	10.7	
Lint Index:				
(g lint/100 seeds)	6.44	7.81	9.01	

		100 L		COTTON
*11. BOLL	M658 DEL M 5/28	ββ2 → SG747	MAXXA	
Lint Percent: Picked Pulle	5128 ed 40.4	10.5	41.4	. "
X Picked Fund	40.4	42.5	41.4	
OR				
Gin Turnout: Picked Stri	ipped			
Number of Seeds per Boll	30.3	33.5	33.8	·
_	37	38	33	
Grams Seed per Boll	5.0	5.4	6.2	
Number Locules per Boll	4-5	4-5	4-5	
Boll Type:				
(Stormproof, Storm Resistant,	Open Open	Open	Open	· · · · · · · · · · · · · · · · · · ·
12. FIBER PROPERTIES				
Specify Method (HVI or other)	: Individual Instruments			
* Length: (inches, 2.5% SL)	1.17	1.12	1.18	
* Uniformity: (%)	47.5	48.2	49.9	
* Strength, T1 (g/tex) stelomet	er 21.5	17.5	24.5	
* Elongation, E1 (%)	6.31	8.38	7.5	
* Micronaire:	4.05	4.11	3.85	
Fineness (Source)				
Yarn Tenacity: (cN/tex, 27 tex)			
Yarn Strength (lbs. 22's)	128.8	108.4	146.1	
13. DISEASES: (NT=Not Teste	ed, S= Susceptible, MS=Modera	ately Susceptible, MR=Mode	rately Resistant, R=Resistant)	
<u>NT</u>	Alternaria macrospora	<u>NT</u>	Fusarium Wilt	
<u>NT</u>	Anthracnose	NT	Phymatotrichum Root Rot	
NT	Ascochyta Blight	NT	Pythium (specify species)	
<u>NT</u>	Bacterial Blight (Race 1)	<u>NT</u>	Rhizoctonia solani	:
<u>NT</u>	Bacterial Blight (Race 2)	<u>NT</u>	Southwestern Cotton Rust	
NT	Bacterial Blight (Race)	NT	Thiclaviopsis basicola	
NT	Diplodia Boll Rot	MR	Verticillium Wilt	
<u>NT</u>	Other (specify)			
	* •			

14. NEMATODES, INSECTS AND PESTS: (NT=Not tested, S=Susceptible, MS= Moderately Susceptible, MR=Moderately Resistant, R= Resistant

<u>NT</u>	Root-Knot Nematode	NT	Reniform Nematode
<u>NT</u>	Boll Weevil	NT	Grasshopper (specify species):
<u>NT</u>	Bollworm	<u>NT</u>	Lygus (specify species):
<u>NT</u>	Cotton Aphid	<u>NT</u>	Pink Bollworm
NT	Cotton Fleahopper	<u>NT</u>	Spider Mite (specify species):
<u>NT</u>	Cotton Leafworm	NT	Stink Bug
<u>NT</u>	Cutworm (specify species):	<u>NT</u>	Thrips (specify species):
NT	Fall Armyworm	NT	Tobacco Bud Worm
<u>NT</u>	Other (specify):		

^{15.} COMMENTS: Present any additional information that cannot adequately be described in 1 through 13 which significantly distinguishes your variety.

Exhibit D. Additional Description - M658 'DEL MAR' STERJOY

Table 2. 2001 CPCSD Upland AST - Summary of Three California Locations

		Mic		4.05	4.26	4 13	0.30	4.7
		ņ		2.9	о С	7.7	0.6	0.9
٠		Ξ	(a/tex)	190	18.2	21.2	1.3	4.5
	Unif	index		0.46	0.46	0.46	0.01	1.6
2.5%	span	ength	(ii)	1.108	1.107	1.158	0.021	4.
	Ë	index	(a)	7.7	7.3	9.9	0.4	5.4
Lint	Der	poll .	(b)	2.3	2.3	2.0	0.2	8.2
Seeds	per	Boll		29	32	31	2	6 6
	Boll	weight	(<u>a</u>	5.2	5.4	5.0	0.4	7.8
	Seed	Index	(B)	10.0	8.6	8.6	0.5	5.6
	Seed	Percent	(%)	56.6	57.5	59.6	6.0	[.
	Lint	Percent	(%)	43.4	42.5	40.4 59.6	6.0	1.6
						14.3		
Seed	Turn	Out	(%)	51.1	53.5	54.4	1.4	1 .
G	Turn	Out	(%)	32.9	33.0	31.3	0.9	6
	Seed	Yield	(Ibs/A)	2032	2206	2171	249	10.0
	Lint	Yield	(Ibs/A)	1375	1384	1393	164	10.0
	_	Yield	(Ibs/A)	4047	4113	4225	463	6.6
		Variety		STV 474	SG 747	M658	LSD.05	გ

Table 3. 2001 CPCSD Upland AST - Summary of Three California and Two Arizona locations

	Seed		-	Gin						Seeds	Lint		2.5%				
•	Cotton		Seed	Turn	Gin	Lint	Seed	Seed	Boll	per	per	Lin	span	Unif.			
Variety	Yield		Yield	Out	Loss	_	Percent	Index	weight	Boll	poli	index	length	index	Ξ	Ш	Mic
	(Ips/A)	_	(Ibs/A)	(%)	(%)		(%)	(g)			(b)	(6)	(ii)		(q/tex)		
STV 474	4146		2197	34.5	7.9		57.7	10.4	5.2	29	2.2	7.6	1.108	0.46	19.0	7.7	4.44
SG 747	4202		2268	34.5	6.8		58.0	10.1	5.5	32	2.3	7.3	1.094	0.46	18.8	0	4.64
M658	3824	1253	2078	33.1	6.9	38.6	2.09	9.9	5.0	31	2.0	6.4	1.164	0.46	21.4	7.5	4.35
LSD.05	433	153	270	1.2	1.0		1.2	0.4	0.4	2	0.2	0.4	0.029	0.01	-	0.5	0.31
ટે	11.8	12.7	10.7	5.6	12.0		1.6	3.7	9.9	0.9	7.7	4 4	2.1	1.7	4.4	5.5	6.1

Exhibit D. Additional Description - M658 ' DEL MAR' TAR' STERLOU

Table 4. 2000-2001 CPCSD Upland AST - Summary of Ten California and Arizona locations

	Seed		Gi			2.5%				
٠.	Cotton	Lint	TuT	Lint	Lint	span	Unif.			
Variety	Yield	Yield	Out	Percent	index	length	index	Ξ	Ħ	Mic
	(Ibs/A)	(lbs/A)	(%)	(%)	(B)	Ē		(g/tex)		
STV 474	4300	1470	33.0	42.6	7.5	1.112	0.47	18.4	7.6	4.28
SG 747	4407	1492	33.1	42.0	7.3	1.103	0.47	18.3	& &	4.46
M658	4191	1364	31.5	40.1	9.9	1.166	0.46	21.4	7.0	4.25
LSD.05	296	108	1.0	6.0	9.0	0.021	0.01	1.0	0.4	0.24
<i></i> ≥	9	-	2.0	1.7	5.0	1.89	1.91	5.1	6.2	5.8

Table 5. 2002 CPCSD Upland AST - Summary of Three California and Two Arizona Locations

CA AZ Overall Out Turn Fiber Length Unif fariety Avg Avg Out Length Ratio T1 E1 Mic Rd (1bs/A) (1ss/A) (1					Gin			H	HVI Fiber Properties	erties		
Avg Avg Avg Out Length Ratio T1 E1 Mic (lbs/A) (lbs/A) (lbs/A) (in) (%) (g/tex) 4.37 1237 1554 1343 33.4 1.132 83.5 29.9 8.2 4.37 7 1215 1585 1338 33.8 1.131 83.6 28.3 8.7 4.36 5 97 122 93 0.8 0.017 0.6 1.0 0.2 0.25 6.5 4.8 7.4 1.8 1.4 0.8 3.3 3.4 5.6		გ	ΑZ	Overall	Turn	Fiber	Unif					
(lbs/A) (lbs/A) (lbs/A) (in) (%) (g/tex) 1237 1554 1343 33.4 1.132 83.5 29.9 8.2 4.37 1215 1585 1338 33.8 1.131 83.6 28.3 8.7 4.36 1246 1413 1302 31.5 1.180 83.7 32.2 7.8 4.20 97 122 93 0.8 0.017 0.6 1.0 0.2 0.25 6.5 4.8 7.4 1.8 1.4 0.8 3.3 3.4 5.6	/ariety	Avg	Avg	Avg	Ont	Length	Ratio	Σ	낊	Mic	R	•
1237 1554 1343 33.4 1.132 83.5 29.9 8.2 4.37 1215 1585 1338 33.8 1.131 83.6 28.3 8.7 4.36 1246 1413 1302 31.5 1.180 83.7 32.2 7.8 4.20 97 122 93 0.8 0.017 0.6 1.0 0.2 0.25 6.5 4.8 7.4 1.8 1.4 0.8 3.3 3.4 5.6		(Ibs/A)	(Ibs/A)	(Ibs/A)	(%)	(ii)	(%)	(g/tex)				
1215 1585 1338 33.8 1.131 83.6 28.3 8.7 4.36 1246 1413 1302 31.5 1.180 83.7 32.2 7.8 4.20 97 122 93 0.8 0.017 0.6 1.0 0.2 0.25 6.5 4.8 7.4 1.8 1.4 0.8 3.3 3.4 5.6	ST474	1237	1554	1343	33.4	1.132	83.5	29.9	8.2	4.37	76.2	0.6
1246 1413 1302 31.5 1.180 83.7 32.2 7.8 4.20 97 122 93 0.8 0.017 0.6 1.0 0.2 0.25 6.5 4.8 7.4 1.8 1.4 0.8 3.3 3.4 5.6	SG747	1215	1585	1338	33.8	1.131	83.6	28.3	8.7	4.36	77.2	0.0
97 122 93 0.8 0.017 0.6 1.0 0.2 0.25 6.5 4.8 7.4 1.8 1.4 0.8 3.3 3.4 5.6	M658	1246	1413	1302	31.5	1.180	83.7	32.2	7.8	4.20	77.9	7.9
6.5 4.8 7.4 1.8 1.4 0.8 3.3 3.4 5.6	-SD.05	97	122	93	9.0	0.017	9.0	1.0	0.2	0.25	1.2	0.2
	2	6.5	4.8	7.4	6	4.	0.8	3.3	3.4	5.6	4.	4

REPRODUCE LOCALLY. Include form number and edition date on all U.S. DEPARTMENT OF AGRICULTURE	reproductions.	FORM APPROVED - OMB No. 0581-0055
AGRICULTURAL MARKETING SERVICE	Application is required in order to de certificate is to be issued (7 U.S.C. 2	2421). The information is held
EXHIBIT E	confidential until the certificate is iss	ued (7 U.S.C. 2426).
STATEMENT OF THE BASIS OF OWNERSHIP 1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION	3. VARIETY NAME
. ,	OR EXPERIMENTAL NUMBER	LAL
California Planting Cotton Seed Distributors	M658	'DEL MAR' Stesso
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)
PO Box 80357 Bakersfield, CA 93380-0357	(661) 399-1400	(661) 399-3169
	7. PVPO NUMBER 2004	400158
8. Does the applicant own all rights to the variety? Mark an "X" in th	e appropriate block. If no. please expl	ain. YES NO
.,		X YES NO
9. Is the applicant (individual or company) a U.S. national or a U.S. t	pased company? If no, give name of o	country. YES NO.
10. Is the applicant the original owner?	NO If no, please answer one	of the following:
A		
a. If the original rights to variety were owned by individual(s), is	(are) the original owner(s) a U.S. Nation NO If no, give name of count	
YES	NO If no, give name of count	•
11. Additional explanation on ownership (Trace ownership from original contents)		reverse for extra space if needed):
The applicant is the original breeder and current owner o	f the variety.	
The variety was developed from germplasm and seedstoo applicant, at facilities owned by the applicant, or through	cks owned by the applicant, by ind contractual arrangements made by	ividuals employed by the y the applicant.
PLEASE NOTE:		
Plant variety protection can only be afforded to the owners (not licens	sees) who meet the following criteria:	
If the rights to the variety are owned by the original breeder, that penational of a country which affords similar protection to nationals or	erson must be a U.S. national, national f the U.S. for the same genus and spec	of a UPOV member country, or ies.
If the rights to the variety are owned by the company which employ nationals of a UPOV member country, or owned by nationals of a genus and species.	yed the original breeder(s), the compan country which affords similar protection	y must be U.S. based, owned by to nationals of the U.S. for the same
3. If the applicant is an owner who is not the original owner, both the	original owner and the applicant must n	neet one of the above criteria.
The original breeder/owner may be the individual or company who di Act for definitions.	rected the final breeding. See Section	41(a)(2) of the Plant Variety Protection
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